

Patent Abstracts of Japan

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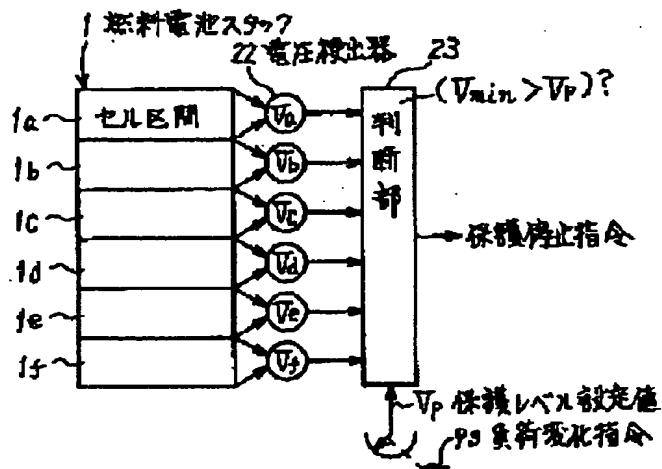
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APPLICANT : FUJI ELECTRIC CO LTD;

INVENTOR : UJIE TAKASHI;

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TITLE : PROTECTION/SUSPENSION METHOD
FOR FUEL CELL POWER PLANT



ABSTRACT : PURPOSE: To prevent a fuel cell from being damaged by detecting a gas shortage condition which locally takes place in a cell stack when a command is directed to increase fuel cell loading, and thereby suspending the operation of the fuel cell for protecting the cell.

CONSTITUTION: A fuel cell stack 1 is divided into a plurality of cell blocks 1a, 1b, 1c,...1f and the like while plural unit cells are made to be one unit, so that each voltage V_a , V_b , V_c ,... V_f and the like in each cell block is thereby detected by a voltage detector 22. Detected voltage is compared by a judging means, with a protection level set value V_p determined in advance when either one of respective voltages V_a , V_b , V_c ,... V_f and the like for the cell blocks is found to have been lowered to the protection level set value V_p in a process that the output electric power of fuel cell stack is quickly increased by a load change command 9s, it is judged that gas shortage takes place in some cell blocks, so that the fuel cell is suspended in operation so as to be protected.

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